REMARKS

In response to the Office Action mailed January 21, 2005, and Advisory Actions dated May 9, 2005 and June 7, 2005, Applicant respectfully requests reconsideration. To further the prosecution of this Application, Applicant has cancelled claims, added new claims, and amended claims, and submits the following remarks. The claims as now presented are believed to be in allowable condition.

Claims 1, 8, 15, and 22 have been cancelled; claims 2-5, 7, 9-12, 14, 16-19, 21, 23, 25, 27 and 29 have been amended; and claims 31-37 have been added. Claims 2-7, 9-14, 16-21 and 23-37 are pending. Claims 34-37 are independent claims.

The Examiner is thanked for his time and consideration in a brief telephone discussion with Mr. Thompson on June 21, 2005. In that discussion, the general nature of the amendments being made herein were explained to the Examiner, and the Examiner indicated that the amendments appear to be helpful in advancing the prosecution of this application.

Preliminary Matters
Objection to the Drawings

In the final Office Action dated January 21, 2005, the drawings were objected to because they included a reference number not mentioned in the description. Applicant has amended the description to cure this minor informality. In particular, one of ordinary skill in the art would know that the Applicant's disclosed payload field 126 included a series of results 126-1, 126-2, <u>126-3</u> as illustrated in Fig. 6, and Applicant has amended the description to reflect this fact. No new matter has been added. Accordingly, it is respectfully requested that the objection to the drawings be withdrawn.

Rejections under §102 and §103

In the final Office Action, all of the claims were rejected under 35 U.S.C. §102 and/or 35 U.S.C. §103 in view of the <u>Sharangpani</u>, <u>AAPA</u>, and <u>Lemmon</u> references as well as other (secondary) references. Prior independent claims 1, 8, 15 and 22 have been cancelled, and new independent claims 34-37 have been added. The remaining dependent claims have been amended to depend from claims 34-37 as appropriate. In view of these amendments, the rejections of the previously pending claims are no longer applicable.

New Claims

It will be observed that new independent claims 34-37 include features not found in the original independent claims, including (1) storing a shared data structure and performing a complex operation on the shared data structure using script command functionality of a communication, and (2) performing either a script command or a basic write command based on the contents of the command field of the communication. It is believed that these two features help clearly distinguish claims 34-37 from the art of record, including the above-cited references, as discussed briefly below.

<u>Sharangpani</u> is seen to teach a method of processing branch instructions efficiently (column 1, lines 66-67). In particular, one or more branch instructions are placed in an instruction bundle with the instructions ordered in an execution sequence within the bundle (column 2, lines 4-8). The bundles of instructions are transferred to execution units indicated with a template field that is associated with the bundle (column 2, lines 8-10). The template field 220 encodes a template type that indicates how instruction slots 210 are mapped to execution units (column 4, lines 64-67). Such operation enables processing of instruction groups and suppression of instructions subsequent to taken branches (column 5, lines 57-62). There is no disclosure in <u>Sharangpani</u> of manipulating a shared data structure of a data storage system, nor of a communication having a command field that includes either a basic write command or a script command

depending on whether a basic operation is being performed or a complex operation of manipulating the shared data structure is being performed.

AAPA discloses a conventional data storage system having memory circuit boards which are configured to respond to a small set of basic instructions such as READ, WRITE, ADD and MASK-COMPARE-AND-SWAP commands (page 2, lines 5-7). Communications between interfaces and the memory circuit boards of the data storage system require several separate communications (page 2, lines 24-25). The large number of communications results in poor response time due to delays, e.g., handshaking delays in waiting for a memory circuit board to complete an operation incrementally before sending a communication for a next operation, resource contention delays due to contention for a bus or buses, etc. (page 3, lines 3-8). There is no disclosure in AAPA of manipulating a shared data structure of a data storage system by performing a complex operation using a communication with a script command, nor of a communication having a command field that includes either a basic write command or the script command depending on whether a basic operation is being performed or the complex operation is being performed.

Lemmon discloses that the bandwidth of a first bus and a second bus may be unequal due to differences in protocol overheads and cycle times between the buses (Abstract, lines 1-3). Lemmon discloses equalizing the bandwidth between the buses without sacrificing any bandwidth on the lower bandwidth bus and without introducing any buffering in a control logic device (Abstract, lines 3-6). The control logic equalizes the bandwidths of the buses by instructing a device coupled to the second bus to insert a partial dead bus cycle in a read transmission thereby adjusting read timing on the second bus when the second bus is heavily loaded (Abstract, lines 6-11). There is no disclosure in Lemmon of manipulating a shared data structure of a data storage system, nor of a communication having a command field that includes either a basic write command or a script command depending on whether a basic operation is being

performed or a complex operation of manipulating the shared data structure is being performed.

Conclusion

Based on the amendments and remarks herein, it is respectfully urged that this application is now in condition for allowance. Favorable action is respectfully requested. The Examiner is urged to telephone the undersigned attorney if there are any issues remaining that can be resolved thereby.

Applicant hereby petitions for any extension of time which is required to maintain the pendency of this case. If there is a fee occasioned by this Amendment, including an extension fee, that is not covered by an enclosed check, please charge any deficiency to Deposit Account No. 50-0901.

If the enclosed papers or fees are considered incomplete, the Patent Office is respectfully requested to contact the undersigned collect at (508) 366-9600, in Westborough, Massachusetts.

Respectfully submitted,

James F. Thompson
Attorney for Applicant
Registration No.: 36,699
CHAPIN & HUANG, L.L.C.
Westborough Office Park
1700 West Park Drive
Westborough, Massachusetts 01581
Telephone: (508) 366-9600
Facsimile: (508) 616-9805

Attorney Docket No.: EMC01-31(01129)

Dated: June 21, 2005